REMARKS/ARGUMENTS

This case has been reviewed and analyzed in view of the Official Action dated 31 December 2003. Responsive to the rejections made by the Examiner in the outstanding Official Action, Claims 1 and 7 have been amended to more clearly clarify the inventive concept of the Applicant.

Prior to discussing the Examiner's specific objections and rejections made in the outstanding Official Action, it is believed that it may be beneficial to briefly review the subject Patent Application system. The subject Patent Application system is directed to a computer keyboard with specific functionality directed to the Microsoft Windows and Windows-type systems. The keyboard includes three special function blocks, including the file and clipboard block 2, an Office block 3, and an application-setting block 4. Of specific interest is the Office block 3, which includes keys specifically designed for the Microsoft Office Suite. As shown in Fig. 3 of the subject Patent Application Drawings, the icons printed on the keys match the icons used with the Microsoft Office Suite. These functions may also be used with other similar business-related software.

The Office function keys in block 3 are also the standard keyboard function keys F1 through F12. Office functions are actuated through the use of key switch 31. By arranging the Office-related functions on the standard F1-F12 keys, space is saved on the keyboard, thus reducing the size of the keyboard and easing manufacturing costs and labor.

The Examiner has rejected Claims 1-6 and 8-32 under 35 U.S.C. § 103(a) as being unpatentable over the Freedman Patent #5,600,313 in view of the Goff Patent #5,659,308 and the Hsu Patent #6,320,519. It is the Examiner's contention that it would have been obvious to one of ordinary skill in the art to modify the system of Freedman with the teaching of Goff such that each function key generates a pseudo composite-key code representing actuation of more than one key because both references are related to a keyboard utilizing function keys which are programmable and further because it is conventional in the keyboard art for the function keys to generate or represent a pseudo composite-key code. The Examiner further contends that it would have been obvious to one of ordinary skill in the art to apply the teaching of Hsu to the modified system of Freedman such that to provide function keys such as a cut key, paste key, copy key, mark key, redo key, bold key, or any other similar function keys which are made of composite-key codes because all the applied references are related to a keyboard having various types of function keys for performing various functions without using a mouse or moving a user's hand from the keyboard for the activation of the noted function keys.

The Freedman reference is directed to a computer keyboard. As shown in Fig. 7, a set of icon keys are formed on the computer keyboard. The three sets of icon keys form a set of static icon keys 66, a set of command icon keys 68, and a set of tool bar icon keys 70. The set of command icon keys is positioned vertically on a right side of the keyboard

mechanism. The tool bar icon keys are positioned horizontally above the function keys 44 of the keyboard mechanism 28.

In the Freedman reference, the icon keys, which may be applied to Office-related applications, are positioned in groups 66 and 70, which are positioned substantially apart from the function keys F1-F12 (44). By separating the icon or Office keys from the function keys, the Freedman system makes the keyboard unnecessarily bulky and additionally is neither cost nor labor effective, as the keyboard must be manufactured specially.

The Goff reference is directed to a keyboard scan code translation system and method. The Goff reference is cited by the Examiner merely to show that keys generating a pseudo composite-key code is old and well-known in the art. The Goff reference is not specifically directed to special function keys having specific functionality, nor is it directed to a specific arrangement of keys on a keyboard.

Thus, even in combination, neither the Freedman reference nor the Goff reference show or suggest the use of specific Office-related functions being associated with each of the standard function keys F1-F12, as is clearly shown in the subject Patent Application system.

The Examiner has further cited the Hsu reference which is directed to a keyboard and method for switching key codes with a single modifier key. The Examiner has specifically cited Hsu to show that function keys are made of various types of composite-

key codes of "control", "ALT", and "shift" keys and some other keys on the standard keyboard.

The system of the subject Patent Application, as shown in Fig. 3 of the subject Patent Application Drawings, includes a special Office key block 3. These keys are associated with specific functions and applications of the Microsoft Office Suite, commonly used in many businesses around the World. Though the Goff and Hsu references both teach multi-functionality codes being generated for single keys, neither have specific applications, specifically those related to the Microsoft Office Suite applications and programs.

Even when taken in combination with the Freedman reference, none of the three (3) cited references by the Examiner teach the specific Office-related functions being associated with the standard F1-F12 keys on a standard Windows keyboard. The Freedman reference is directed to icon keys which are positioned separately from the function keys. This makes the keyboard unnecessarily bulky and further creates problems in terms of parts, labor, manufacturing, and cost.

Thus, none of the cited references, even when taken in combination, teach or suggest the use of Office-related function keys overlaying the typical F1 through F12 keys on a computer keyboard, in order to improve efficiency and also provide a compact keyboard system.

Thus, neither the Freedman reference, the Hsu reference, nor the Goff reference, when taken alone or in combination, provide for: "...wherein said Office block is a standard keyboard function block including standard function keys F1 through F12, Office related functions of said Office block being actuated through actuation of a key switch associated with said key switch operation...", as is clearly provided by newly-amended Independent Claim 1.

Thus, based upon newly-amended Independent Claim 1, it is not believed that the subject Patent Application has been made obvious by the Freedman reference, Goff reference, or Hsu reference, when taken alone or in combination, when Independent Claim 1 is carefully reviewed.

The Examiner has additionally rejected Claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Freedman, Goff, and Hsu as applied to Claim 1 above, and further in view of the Chou Patent #6,445,381. It is the Examiner's contention that it would have been obvious to one of ordinary skill in the art to apply the teachings of Chou to the modified keyboard of Freedman such that to switch function keys related to an Office block by a switching key which uses a light emitting element to indicate the switching status because all the applied references are related to keyboards utilizing function keys.

The Chou reference is directed to a method for switching a keypad. As shown in Figs. 1-3, a hot-key 2 is added to keypad 1 and communicates with keypad 1 via a USB

interface. The hot-key 2 or a Num Lock key 3 in the keypad 1 starts a switching program. The switching program is designed to take the hot-key 2 with first priority.

The Chou reference is directed to the use of a hot-key in order to provide dual functionality for the keys of an externally coupled numeric keypad. The hot-key 2 allows alternate functionality of the keys of the numeric keypad, however, it does not provide for alternate functionality of the standard function keys F1-F12, as shown in the subject Patent Application system. Additionally, this reference is directed to a separate keypad which may be installed on and coupled to a keyboard via a standard USB interface. Thus, this reference teaches away from a compact keyboard system wherein standard keys have multiple functionality.

As argued above with reference to the Freedman reference, the Goff reference, and the Hsu reference, the system of the subject Patent Application, shown in Fig. 3 of the subject Patent Application Drawings, provides for a particularly compact arrangement of keys wherein the Office block 3 includes specific Office-related functions, applications, and programs overlaid on the standard function keys F1-F12.

The keyboard of the subject Patent Application is specifically directed to Office Suite applications, and similar business applications, rather than general functionality. Additionally, by providing these specific functions with the standard F1-F12 keys on a keyboard, the keyboard is made not only in a compact fashion, thus saving space, but is also easy to manufacture, since the F1-F12 keys are standard.

Neither the Freedman reference, the Goff reference, the Hsu reference, nor the Chou reference, when taken alone or in combination, teach or suggest the use of an Office block having Office related functions overlaid on the standard F1-F12 keys. In fact, the Freedman reference and the Chou reference, which are the two cited references directed to specific keyboard arrangements, both teach away from Office-related functions being overlaid on the F1-F12 keys.

Thus, neither the Freedman reference, the Goff reference, the Hsu reference, nor the Chou reference, when taken alone or in combination, provide for: "...wherein said Office block is a standard keyboard function block including standard function keys F1 through F12, Office related functions of said Office block being actuated through actuation of a key switch associated with said key switch operation...", as is clearly provided by newly-amended Independent Claim 1.

Thus, based upon newly-amended Independent Claim 1, it is not believed that the subject Patent Application is made obvious by either the Freedman reference, the Goff reference, the Hsu reference, or the Chou reference, when taken alone or in combination, when Independent Claim 1 is carefully reviewed.

It is now believed that the remaining Claims 2-32 show patentable distinction over the prior art cited by the Examiner for at least the same reasons as those previously discussed for Independent Claim 1.

The remaining references cited by the Examiner but not used in the rejection have been reviewed, but are believed to be further removed when patentable distinctions are taken into account than those cited by the Examiner in the rejection.

It is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

Respectfully submitted,

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